

Fault Abstract for Cycle starting 6 November 2005

| Week | | Cycle Category |
|------|-------|--|
| 11/6 | 11/13 | Total |
| 0.7 | 0.1 | 0.9 VUV Downtime |
| 0 | 0 | 0.0 VUV Regulation and Compliance Downtime |
| 3.63 | 0.85 | 4.5 X-Ray Downtime |
| 0 | 0 | 0.0 X-Ray Regulation and Compliance Downtime |
| 9.5 | 1.08 | 10.6 Equipment Downtime |

| X-ray DT | Total | Type of Problem |
|-------------|-------------|----------------------------|
| 0.36 | 0.36 | RF Trip |
| 1.92 | 1.92 | X1 Gap Control |
| | 0.53 | Power Supply Glitch (XSXD) |
| | 0.32 | X-25 AI Trip |
| 1.35 | 1.35 | Power Dip |
| <u>3.63</u> | <u>0.85</u> | <u>4.48</u> |

| VUV DT | Total | Type of Problem |
|-------------|------------|------------------------|
| 0.27 | 0.13 | 0.4 RF Trip |
| 0.05 | | 0.05 UV Database Micro |
| 0.40 | 0.13 | 0.53 Power Dip |
| <u>0.72</u> | <u>0.3</u> | <u>0.98</u> |

n.b. All times in hours

Faults for week starting 13 November 2005

| Wk | Fault # | Date | Time | Group | XRDT | UVDT | EQD | Problem |
|----------|---------------------------|------------|------|----------------------|------|------|------|--|
| B | Week of November 13, 2005 | | | | 0.85 | 0.13 | 1.08 | |
| | LS05-0545 | 11/14/2005 | 2034 | VUV RF Group | 0 | 0.13 | 0.13 | 2034hrs: VUV beam dump - URF1 reverse pwr trip occurred after rampup. |
| | LS05-0546 | 11/15/2005 | 718 | User Group | 0 | 0 | 0 | 0718: X-ray ring is now ramped down and OPCO's have now opened ring up for E.R.Access for X5. |
| | LS05-0547 | 11/15/2005 | | Controls/Diagnostics | 0 | 0 | 0 | BX Flag #8 has no illumination. Only the injected beam will be visable when flag is inserted. No illumination. |
| | LS05-0548 | 11/15/2005 | | Controls/Diagnostics | 0 | 0 | 0 | BX Flag #8 has no illumination. Only the injected beam will be visable when flag is inserted. No illumination. |
| | LS05-0549 | 11/15/2005 | | Controls/Diagnostics | 0 | 0 | 0 | BX Flag #8 has no illumination. Only the injected beam will be visable when flag is inserted. No illumination. |
| | LS05-0550 | 11/15/2005 | | Controls/Diagnostics | 0 | 0 | 0 | BX Flag #8 has no illumination. Only the injected beam will be visable when flag is inserted. No illumination. |
| | LS05-0551 | 11/15/2005 | 810 | Controls/Diagnostics | 0 | 0 | 0 | BX Flag #8 has no illumination. Only the injected beam will be visable when flag is inserted. No illumination. |
| | LS05-0552 | 11/16/2005 | 611 | Power Systems Group | 0.18 | 0 | 0.18 | 0611: Xray beam dumped to 65mA. Fast histories show XQB supply glitched at time of dump. |
| | LS05-0553 | 11/15/2005 | 625 | X-Ray RF Group | 0 | 0 | 0.1 | 0625: XRF1 tripped on the following:125KW Plate Undervoltage, 125KW Plate Crowbar, 125KW Line Overcurrent, and 125KW Screen Undervoltage. System tripped when beam dumped during X17 rampdown. |
| | LS05-0554 | 11/19/2005 | 401 | Controls/Diagnostics | 0 | 0 | 0 | 0401: Uv Database micro has failed. |
| | LS05-0555 | 11/19/2005 | 547 | X-Ray Misc | 0.23 | 0 | 0.23 | 0547: X-ray beam has dumped. Beam has dropped out to 19ma.Reason for dump is unknown at this time.All magnets and Rf remain on. |
| | LS05-0556 | 11/19/2005 | 1619 | Power Systems Group | 0.12 | 0 | 0.12 | 1619hrs: Xray beam dropout to 59mA. Ramping down for full current refill. |
| | LS05-0557 | 11/19/2005 | 1636 | X-Ray Misc | 0.32 | 0 | 0.32 | 1636hrs: Xray beam dumped - X25AI fault occurred at start of rampup after full current refill. |

X-ray Statistics for week starting on 13 November 2005

Operations

| | | |
|--|-------|------|
| Scheduled operations | 120 | [hr] |
| Expected number of scheduled fills | 11 | |
| Fills completed as scheduled (start and finish) | 8 | |
| Anticipated Fill Budget (45 min. per fill) | 8.25 | [hr] |
| Anticipated Operating Beam Available | 111.8 | [hr] |
| Total fill time during scheduled operations | 7.1 | [hr] |
| Delivered beam during scheduled operations | 112.1 | [hr] |
| Total beam available (including unscheduled ops) | 137.0 | [hr] |

Disruption Statistics

| | | |
|----------------------------------|------|------|
| Number of disruptions | 3 | |
| Total lost operations time | 0.9 | [hr] |
| Average time between disruptions | 77.3 | [hr] |

One fault during an injection shows only as a long fill time

Some degraded operation due to CFN construction

CONCISE STATUS :
BERMAN METER
OPERATIONS FOR THE
WEEK OF
13 NOVEMBER 2005

✓✓✓ **GOOD**



Three user disruptions
Some disruption from CFN Construction

UV Statistics for week starting on 13 November 2005

Operations

| | | |
|--|-------|------|
| Scheduled operations | 128 | [hr] |
| Expected number of scheduled fills | 37 | |
| Fills completed as scheduled (start and finish) | 38 | |
| Anticipated Fill Budget (5 min. per fill) | 3.1 | [hr] |
| Anticipated Operating Beam Available | 124.9 | [hr] |
| Total fill time during scheduled operations | 2.3 | [hr] |
| Delivered beam during scheduled operations | 125.6 | [hr] |
| Total beam available (including unscheduled ops) | 165.6 | [hr] |

Disruption Statistics

| | | |
|----------------------------------|------|------|
| Number of disruptions | 1 | |
| Total lost operations time | 0.1 | [hr] |
| Average time between disruptions | 44.6 | [hr] |

n.b. One disruption during fill

CONCISE UV STATUS :

Dan-o-graph
OPERATIONS FOR
THE WEEK OF
13 NOVEMBER 2005

✓✓✓✓ **GREAT**

UV disruption time 0.1 hr
125.6 hours of user beam



| Ring | X | U |
|-----------|-----|---|
| Schedule | B | B |
| Sunday | O/S | O |
| Monday | SIS | O |
| Tuesday | S/O | S |
| Wednesday | O | S |
| Thursday | O | O |
| Friday | O | O |
| Saturday | O | O |

| Fill Metrics | X | U |
|---------------------------------------|------|----|
| Week Starting on | B | B |
| November 13, 2005 | | |
| Planned number of User Fills | 11 | 37 |
| Total Number of User Fills | 11 | 37 |
| Fills to scheduled completion | 8 | 38 |
| Disruptions during Operations | 3 | 0 |
| Average Time between Disruptions [hr] | 77.3 | |
| Disruptions Requiring Repairs | 2 | |
| Average Time to Recover [min] | 22.3 | |
| Average User Fill Time [min] | 38.6 | |

| Planned X-ray Hours | | |
|---------------------|-----|-------|
| Maintenance | 6 | |
| Studies | 42 | |
| Operations | 120 | 120 |
| Fill Budget | | (8.3) |

| | |
|--------------------|-------|
| Planned User Hours | 111.8 |
|--------------------|-------|

Delivered Operations 112.1

| Actual X-ray Hours | | |
|--------------------|-----|-------|
| Maintenance | 6 | |
| Studies | 17 | |
| Scheduled Op'n | 120 | 120 |
| Unscheduled Op'n | 25 | 25 |
| Fills | | (7.1) |

| | |
|--------------------|-------|
| Maximum User Hours | 137.9 |
|--------------------|-------|

| | |
|-------------|-------|
| Disruptions | (0.9) |
|-------------|-------|

Delivered User Beam 137.0